

Chairman of this committee is Jeff Herzberg, Chief of AEA 8. Direct your feedback to jherzberg@aea8.k12.ia.us or to the Council's Executive Director Jeff Weld at jeff.weld@uni.edu. Thank you.

Public Awareness Campaign

(Draft for Executive Committee March 12, 2012)

i. **Frame this priority for Iowa: Distance from here to ideal?** [5 year plan]

This does not require an extensive lit. review since the STEM Roadmap set backstory already. More of a brief narrative introduction of our status and where we need to be/can be if your recommendations are enacted.

The Public Awareness Campaign is to support the increase in STEM education in Iowa, it is not an end in itself. It is more important that limited resources go to increasing education, and not telling people to increase education, or that education is increasing. So, our plan is designed first to transmit information that helps that effort, and secondly to increase public awareness.

ii. **Goals/targets: What's the ambition?**

Sounds like most everyone has mission/vision/goals/objectives.

Create a campaign that increases awareness of and interest in STEM. Develop a creative platform that will invite ingenuity, deliver key messages, and build on existing efforts and activities.

- Make connections between skills, interests, academics and STEM related careers
- Generate enthusiasm
- Showcase Iowa and what we have to offer
- Create sense of significance, urgency, and opportunity
- Uniformity (connectedness) of "message"
- Increase STEM appreciation of general public

iii. **Identify some best-practices. What needs to happen in Iowa?** *This is the meat of the action plan – bulleted series of recommendations (provide a link or a reference for where they've proven successful, but don't spend too much space defending them).*

- An email will go out to every science, math and agriculture teacher to ask them to explain the programs or activities that get their kids excited about STEM. Then the best ideas would be videotaped, or explained in narrative or presentation, and put up on a website to promote STEM in Iowa. Much of what has already been done in Iowa's Creative Corridor around Cedar Rapids and Iowa City could be used in other regions. This will help spread the ideas and give others a concrete example to take to administrators, financial supporters, or the community to start a

program in a new location. It could also be a way for business to see what is happening in their community and become involved with education.

- With the help of a professional consultant, a story will be created which helps Iowans understand the sense of urgency that is needed to address the STEM areas across the State of Iowa. This message will be delivered to the focus groups identified by our committee as possibly earning the largest return on our investment.
- Nebraska is getting ready to launch a STEM initiative that allows communities to order a free STEM tool kit providing them with resource to do an interactive educational STEM project with what every audience they are working with - provided by the AIM Institute in Omaha, NE (AIM also provides services to Southwest Iowa so they might be an additional resource).
- Increase STEM Awareness with Annual STEM Awards - To help with raising the public awareness of STEM including the role models of professionals doing outstanding work, support annual STEM Awards for each of the new Iowa Networks. This could be modeled after the very successful annual model awards program from the non-profit Quad City Engineering and Science Council (QCESC). An example of the awards they offer include: Junior and Senior Engineer and Scientist of the Year, Lifetime Achievement and STEM Teacher of the Year. For the QCESC the awards are announced and presented at their annual National Engineers Week Banquet (end of February annually) along with STEM Scholarships. The cost for award plaques and paying for their dinner is very low. Besides the well deserved recognition it provides the individuals and the companies or organizations they work for, it also raises the awareness of STEM and its impact in our communities and state. In support of this, there could be full page splashes in key papers around the state showing the recipients along with recipients of key student STEM related competitions such as FIRST LEGO League, Real World Design Challenge, etc. The splashes would use the branding from the Iowa STEM campaign and be linked to Social Media and website.

iv. **What resources are needed (human and material)? What can we do without new investment vs. what can we do with new investment?**

Each of the bulleted recommendations above should have its resource demands made clear too. What funding would it take? What human capital would be required? Even, what assets does Iowa have in place which could be leveraged?

- The actions in iii will not take significant resources. Many districts have the capability to fill content into a website template. A point of contact will need to be created (Ed Zimmerle at Prairie Lakes AEA perhaps), time dedicated to the collection of videos/examples, and a web presence. Estimated cost \$3000.
- Story development with PSAs will be more demanding in terms of resources as this needs to be done professionally. Estimated cost \$20,000.
- Corporate sponsor may be needed to fund items in tool kits (not sure of cost, would need to do additional research); Our newly established regional STEM coordinators could be the contacts for filling the requests for these kits.
- Annual awards ceremony and banquet with publicity. Estimated cost \$3000

v. **Who needs to do it? Where are the resources?**

More of previous. Add comment on domain of responsibility too if you can – agency or division responsible? And please include any knowledge of additional resources such as grant sources or private sector investments that power similar recommendations elsewhere.

- Each participating teacher, school, district and AEA can do much of the work, if the work is organized by a professional public relations/website developer.
- The professional consultant will have to be identified through an RFP process and hired by (and report to) a small group of people to meet the objectives that will be fully developed once we know there is support from the Executive Council. The resources will need to be either approved in the legislative session and/or grown with public-private partnerships.

vi. **When can we get there? [a timeline]**

Straightforward. Lay out the sequence of events that would have to happen for each recommendation to take flight.

STEM Public Awareness Campaign Timeline (4-year):

October 2011 - June 2012:

Planning & Development of Public Awareness Campaign

- Develop Strong STEM Message
- Research Creating a Teacher Think Tank Website
- Research Use of PR Consultant
- Develop a Method of Delivery Plan for Public Awareness Campaign
- Develop a Strong Social Media Element in the Plan

July 2012 - June 2013:

Implement Year One of Public Awareness Campaign

- Specifically Target Grades 8-10 with “Did You Know?” Campaign
- Spotlight 12 Exemplary Iowa Companies That Support STEM
- Promote Successful Iowa STEM Programs/Projects/Events,
- Implement Social Media Campaign (including active website)

July 2013 - June 2014:

Implement Year Two of Public Awareness Campaign

- Specifically Target Grades 4-7, 11-12, and educators
- Create a database for career match/mapping (example; IPTV)

July 2014 - June 2015:

Implement Year Three of Public Awareness Campaign

- Specifically Target Grades Pk-3, parents and community

vii. **What will the Council need to do?** *Great influence resides within the Council – policy leadership obviously. Be pointed and direct about what actions would need to come through the Council to get your recommendations done.*

For the public awareness campaign to move forward, the Council will need to be an advocate and provide influence within budgeting processes to obtain the financial and in-kind resources necessary for the plan to be implemented. There are many messages, themes, and strategies that could be implemented to achieve the public awareness campaign. To create a focused, strategically developed campaign, the subcommittee strongly believes that the first step will need to be hiring a consultant with expertise and time to develop the comprehensive strategy needed to make the greatest impact. The Council's support in obtaining funding for the consultant either via the state appropriation process or from donations from corporate partners is critical.

In addition, many of the Council members may be in a position to provide 'in-kind' services and/or personnel to work with the consultant in the development and implementation of the plan elements. Until the plan is fully developed with the assistance of the consultant, specific in-kind needs cannot be identified. However, potential needs might include 'graphic design' expertise, printing costs/services, etc.

For the public awareness campaign to be successful, it will require that the messages of the campaign be shared broadly and engage the citizens of Iowa in a variety of methods. In as such, there will be opportunities for Council members to leverage the campaign within their own constituencies. Examples of need for Council support/involvement might include:

- For a career awareness piece for middle/high school students, business and industry will need to assist in identifying examples of specific careers in Iowa businesses that relate to STEM.
- If there is a need to get 'buy-in' and participation from educators across the state, the public awareness campaign would look towards the educators and Jason Glass on the Council to assist in gaining that support/involvement.

Finally, when the draft 'public materials' are in the development stage, the Council, with its broad constituency base, might serve in a review capacity to provide input/feedback on the plans and messaging.

viii. **What will be our success indicators - metrics/outcomes?** [The Eval. Consortium will provide you with a set of common metrics for use across committees]

The success of the Iowa STEM Public Awareness Campaign will be measured as follows:

1. Utilize the existing ACT Tests to measure Iowa student interest (vertical axis below). Ideally would like to be able to breakdown the data to show by several different ways and overall including by gender, ethnicity, location, etc. The current interest % in Iowa is 11%.

http://www.iowamathscience.org/sites/default/files/act_-_stem.pdf

Is there a test that can be used for the same purpose for younger students in Iowa?

2. Develop a short, concise survey to measure the awareness and support for STEM by adults in Iowa including parents and school employees including teachers, counselors and administrators. The survey would be conducted prior to the STEM Awareness Campaign and then used to measure progress after implementation.
3. Measure the enrollment of students in Iowa Colleges and Universities in STEM related majors by overall % with breakdown for science and engineering. Currently 12% in Iowa vs. 15% overall in the U.S.
4. Measure the utilization (number of hits, number of unique users per month, fans, followers, views, etc) of the various on-line social media and websites for Iowa STEM.

ix. **What's the future implication?**

This work is part of a larger, and ongoing, conversation that needs to take place in our communities on the design of our education system. STEM is a key component of that, and this work should assist those attempting to implement best practices in STEM education.

x. **Appendix: Committee. Plan development process. Pertinent references.**

Self-explanatory. Minimal explanation is necessary on the process. (ALL if pertinent)

- Did You Know? Iowa version: <http://bigthink.com/ideas/39600>
- Iowa Future website: <http://www.iowafuture.org/>
- A link to the pictures from the recently held awards banquet in Bettendorf in which the Gov. and Lt. Gov attended with pictures of the award and scholarship recipients.
<http://www.flickr.com/photos/54894113@N00/sets/72157629510622751/>

According to the timeline approved by the Exec. Comm. on Jan. 9, these draft Action Plans arrive to them on March. 12. They'll undergo a period of internal review and feedback to Chairs in April, so that you can plan for an official public debut on May 15 at the State STEM Summit.